



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

PRELIMINARY ISSUE

654.6410
Job Sheet 211660



Part No: 654.6410

Job Qty: 5 pcs

Part Name: Fill Port



Part Weight: 0 lbs

Job Created: 7/23/20

Due Date: 7/30/20

Type: SOLD

Status: New

Priority: Medium

Job Tracking No:

Created By: Jennifer Renwick

Description:

Note: 654.6400 REV.PR2 IPP REV:A 20.07.15 NEW ISSUE DD VERF:JFS

Ship Via:

139 Valve

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	SL-154 - 1	5 pcs	7/30/20		1.00	1.67	Doosan - 1		
							NLX 2500SY - 1		
							SL-154 - 1		
							SL-2500Y - 1		SL 20-7-27
110	QC 2	5 pcs	7/30/20		0.00	0.00	QC 2 - 1		
							QC 2 - 12		
							QC 2 - 14		
							QC 2 - 17		
							QC 2 - 19		
							QC 2 - 2		
							QC 2 - 20		
							QC 2 - 22		
							QC 2 - 23		
							QC 2 - 25		LL
							QC 2 - 32		
							QC 2 - 33		
							QC 2 - 35		
							QC 2 - 39		
							QC 2 - 4		
							QC 2 - 40		
							QC 2 - 44		
							QC 2 - 45		
							QC 2 - 48		
							QC 2 - 49		
							QC 2 - 50		
							QC 2 - 51		
							QC 2 - 52		
							QC 2 - 57		
							QC 2 - 62		
							QC 2 - 63		
							QC 2 - 8		

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 813 632-5200
Email: sales@dartaero.com
www.dartaero.com



Container No: S290424

Part: 654.6410

Job No: 211660

Serial No/Batch: S290424

Revision: REV - PR2

Inspector:

Exp Date:

Instructions:

Date: 07/27/20

					QC 2 - 66	
					QC 2 - 64	
					QC 2 - 65	
					QC 2 - 5	
					QC 2 - 71	
					QC 2 - 73	
					QC 2 - 69	
					QC 2 - 76	
					QC 2 - 86	
					QC 2 - 83	
120 QC 8	5 pcs	7/30/20	0.00	0.00	QC 8 - 12	
					QC 8 - 14	20/08/17
					QC 8 - 17	
					QC 8 - 20	
					QC 8 - 25	
					QC 8 - 3	
					QC 8 - 32	
					QC 8 - 33	
					QC 8 - 35	
					QC 8 - 39	
					QC 8 - 4	
					QC 8 - 44	
					QC 8 - 45	
					QC 8 - 49	
					QC 8 - 58	
					QC 8 - 8	
					QC 8 - 9	
					QC 8 - 68	
					QC 8 - 67	
					QC 8 - 1 (A)	
					QC 8 - 47	
					QC 8 - 40	
					QC 8 - 52	
					QC 8 - 23	
					QC 8 - 57	
					QC 8 - 76	
					QC 8 - 61	
					QC 8 - 66	
					QC 8 - 73	
					QC 8 - 82	
130 Outsource - 17 - Passivate	5 pcs	7/30/20	0.00	0.00	GROOZ	2020-08-18
140 Packaging 2-1 - Receive - B4B	5 pcs	7/30/20	0.00	0.00	Packaging 2 - 1 - B4B	
					Packaging 2 - 2 - B4B	
					Packaging 2 - 3 - B4B	
					Packaging 2 - 5 - B4B	
					Packaging 2 - 4 - B4B	
					Packaging 2 - 6 - B4B	
					Packaging 2 - 7 - B4B	
					Packaging 2 - 8 - B4B	
					Packaging 2 - 9 - B4B	
					Packaging 2 - 10 - B4B	
					Packaging 2 - 11 - B4B	
					Packaging 2 - 12 - B4B	
					Packaging 2 - 13 - B4B	
					Packaging 2 - 14 - B4B	
					Packaging 2 - 15 - B4B	
					Packaging 2 - 16 - B4B	
					Packaging 2 - 17 - B4B	
					Packaging 2 - 18 - B4B	
					Plex 7/23/20 11:10 AM Dart.Renwick.Jennifer	

150 QC 6	5 pcs	7/30/20	0.00 0.00	Packaging 2 - 19 - B4B	
				Packaging 2 - 20 - B4B	
				Packaging 2 - 21 - B4B	
				Packaging 2 - 22 - B4B	
				Packaging 2 - 23 - B4B	
				Packaging 2 - 24 - B4B	
				Packaging 2 - 25 - B4B	
				Packaging 2 - 26 - B4B	
				Packaging 2 - 37 - B4B	
				QC 6 - 9	
160 Packaging 3-1 - Stock - B4B	5 pcs	7/30/20	0.00 0.00	QC 6 - 68	
				QC 6 - 61	
				QC 6 - 40	
				QC 6 - 81	
				QC 6 - 82	
				Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	
170 QC 21 - SA	5 pcs	7/30/20	0.00 0.00	Packaging 3 - 6 - B4B	
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 37 - B4B	
				QC 21 - SA - 21	
				QC 21 - SA - 70	
				QC 21 - SA - 9	

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Part Op 100 - ****CRITICAL PART - EXTREME CARE MUST BE TAKEN**** MUST ENSURE THE COMPONENTS ARE
 Descriptions: NEVER DAMAGE**** 1-Machine as per folio FD336 FOLIO REV: AA DWG REV: PR2 2-Debur
 110 - QC2- Inspect parts off machine FAI/FAIB
 120 - QC8- Inspect parts, second check
 130 - Issue P/O; 46925 PASSIVATE IAW QQ-P-35C, TYPE II -Material type; 303 stainless steel -Certificate of
 Conformity is required
 140 - Certificate of Conformity is required
 150 - QC6- All purchased or subcontracted products
 160 - Identify as per dwg & Stock ****CRITICAL PART - EXTREME CARE MUST BE TAKEN**** MUST ENSURE THE
 COMPONENTS ARE NEVER DAMAGE****
 170 - QC21- Final Inspection - Work Order Release

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M303R1.000	303 Round Bar 1.00	.3750 ft (.075 ea)	100-SL-154 - 1	<u>5250215</u>

Plex 7/23/20 11:10 AM Dart.Renwick.Jennifer

Entered: _____

Date: _____

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: <u>211660</u>		DISPOSITION		DEPARTMENT/PROCESS				Engineering	
Part No. <u>654-6410</u>		Rework ☐		Cross tube ☐		Eng. (Non-AW) ☐		Water Jet ☒	
		Scrap ☐		Small Fab ☐		Prod. Eng. Coord. ☐		Supplier ☐	
		Use-as-is ☒		Large Fab ☐		Rec/Store/Packaging ☐		Quality ☐	
Date: <u>20/8/14</u>		Sequence #: <u>100</u>		QTY Affected: <u>5</u>		MARB (QSI042)		Completed By	
Description Work Order Deviation		Disposition						Lead hand / Supervisor	
*dimension @ .630 is .682								JL 20-8-14	
R.C the part tool is 0.680								Do 20-08-14	
								QC / QA Coordinator	

Root Cause		FAULT CATEGORY									
Operator	☒	Pressure/Forced	☐	Contamination	☐	Power Loss/Surge	☐	Positioned Wrong	☐	Outside Tolerance	☐
Manufacturing Process	☐	Bending	☐	Misaligned/off center	☐	Folio/Program	☐	Drawing	☒	Finish	☐
Equip/Tooling	☐	Crushing	☐	BOM/Route	☐	Grain Direction	☐	Part Lost/Missing	☐	Misread	☐
Handling/Preservation	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐				
Material	☐	Crimp/Kink/Ripple/Wave/Twist	☐	Incomplete/Unclear Instructions	☐	Wrong Stock Pulled	☐				
Product Improvement	☒	Marks/Chatter	☐	Drill Holes	☐	Out of Sequence	☐				
Process Improvement	☒	Mislabeled	☐	Fit/Function	☐	Off-set/Set-up	☐				
Human Factors	☐	Other/Details:									

PART AEROSPACE LTD		Work Order: 2116600
Description: fill part fitting		Part Number: 654.6410
Inspection Dwg: 654.6400	Rev: PR2	Page 1 of 1

INSPECTION SHEET

	Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
①	-0.50	±.005	-0.52	/		VERN	SL-2
②	-2.80	±.005	-2.78	/		VERN+SCREW	SL-2
③	-0.94	±.005	.095	/		VERN	SL-2
④	-6.30	±.01	-6.83	/		"	"
⑤	R.008	±.005	R.008	/			
⑥	.01	±.01	.01	/		VERN	SL-2
⑦	1.5°	±.5°	1.5°	/			
⑧	.01 X 45°	±.01 ±.5°	.01 X 45°	/		VERN	SL-2
⑨	.345	±.005	.346	/		"	
⑩	.760	±.005	.762	/		"	
⑪	.385	±.005	.385	/		"	
⑫	.083	+-.015 -0	.089	/		Op-comp	
⑬	9/16-18 UNF-3A						
.032 wires	major Ø: .5582	±.0044	.558	/		mic	SL-9
	min Ø: .5726	±.0017	.573	/		"	"
⑭	.481	+-.002 -.003	.4805	/		mic	LG-inspb
⑮	.735	±.005	.735	/		VERN	SL-2
⑯	.13	±.01	.131	/		"	"
⑰	R.02	+0 -.015	R.008	/		R-G	
⑱	R.031	+0 -.015	R.023	/		"	
⑲	.800	±.005	.801	/			
⑳	.750	±.005	.751	/			
㉑	Ø .250	+0 -.001	.2495	/		mic+g-pin	CNC-22
	POST SAE 21926-2	±.005 -0					
	.358	±.005 -0	.360	/		VERN	SL-2
	.074	±.015 -0	.080	/		"	"
㉒	303 SS AMS 5640			/		MILL TEST H/T 43207	
㉓	PASSIVATE QQP 352			/		C O F C ALTECH	

Measured by: JL	Checked by: [Signature]	QC Inspector:
Date: 20/07/20	Date: 20/08/27	Date: AUG 31 2020

Engineering Approval: (If necessary)	Date:
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Rev	Date	Change	Revised by	Approved
A	14.07.31	New Issue	KJ	



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB046925



Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

Attention: Grenon, Sylvie

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB046925

PO Date: 8/18/20

Due Date: 8/26/20

Purchase Order

Revision:

Revision Date:

Issued By: Guerin, Kimberley
Phone: 613-632-5200 Ext: 298
kguerin@dartaero.com

Via: Ground

Pymt Terms: Net 60

Freight Terms:

Special Comments:

E-MAILED
2020-08-23

Items

Line Item	Job	Part	Drawing	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	211696	650.7401	650.7400 REV.PNC1	Solenoid Assembly Issue PO: PASSIVATE IAW-172 section 6.1 *****Plunger only***** Individually wrap plungers and bring to outsource rack Retain solenoid body's in machining department	Firmed - XS	-	8/26/20	5 pcs	0 pcs	5 pcs	\$7.6923/pcs	\$38.46
2	211660	654.6410	654.6400 REV-PR2	Fill Port -Issue P/O; PASSIVATE IAW QQ-P-35C, TYPE II -Material type; 303 stainless steel -Certificate of Conformity is required	Firmed - XS	-	8/26/20	5 pcs	0 pcs	5 pcs	\$7.6923/pcs	\$38.46

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K6A 1K7
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PURCHASE ORDER

POHB046925



Items

Line Item	Job	Part	Drawing	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
3	211701	654.6510	654.6500 REV.PR2	Diffuser Cap -4 -Issue P/O; PASSIVATE IAW QQ-P-35C, TYPE II -Material type; 303 stainless steel -Certificate of Conformity is required	Firmed <i>X3</i>	-	8/26/20	3 pcs	0 pcs	3 pcs	\$7.6923/pcs	\$23.08
											Grand Total:	
											\$100.00	

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 8/24/20 10:58 AM Dart.Guerin.Kimberley



Certificat de Conformité / Certificate of Compliance



0 3 0 3 5 6 - 1

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

030356 - 1

Livré à / Ship to

DART AEROSPACE LTD

1270 ABERDEEN STREET

HAWKESBURY, ON, K6A1K7

CANADA

Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD

1270 ABERDEEN STREET

HAWKESBURY, ON, K6A1K7

CANADA

BUYER:

Date expédition Ship date		Créé Par Generated By		Transport / No de Compte Courier / Acc. No.		Bon de commande Client Customer Purchase Order No.			
24-Aug-2020		Ian Wilson				POHB046925			
#Ligne Line#	No. de Série / # Pièce Part Number /Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Quantités / Quantities Qté NC/ NC Qty		Qté Scrap/	À venir/ Back Order
1	650.7401 Rev.PNC1	650.7401 01 -PASSIVATION-DICHROMATE [PASSIVATION BICHROMATE] PASSIVATION AMS 2700/QQ-P-35C TYPE II IAW-172 SECTION 6.1 MATERIAL TYPE 303 STAINLESS STEEL	PASSIVATION CH	5	5	0	0	0	
2	654.6410 Rev.PR2	654.6410 01 -PASSIVATION-DICHROMATE [PASSIVATION BICHROMATE] QQ-P-35C, TYPE II MATERIAL TYPE; 303 STAINLESS STEEL	PASSIVATION CH	5	5	0	0	0	
3	654.6510 Rev.PR2	654.6510 01 -PASSIVATION-DICHROMATE [PASSIVATION BICHROMATE] QQ-P-35C, TYPE II MATERIAL TYPE; 303 STAINLESS STEEL.	PASSIVATION CH	3	3	0	0	0	

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DART INDUSTRIES LTD.

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Notes Additionnelles / Additional Notes

7 packages

Epaisseur réelle
Actual Thickness

Inspecteur Qualité
Quality Inspector

Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
 Our financial and legal responsibility will not be higher than the amount of invoice.



Acciaierie Valbruna S.p.A.

36100 VICENZA (Italia) - Viale della scienza, 25 r.l.
Telefono 0444.868211 - Fax 0444.903536
Stab.: 36100 BOLZANO (Italia) - Via A. Volta, 4/37
Telefono 0471.924111 - Fax 0471.924497

CERTIFICATO DI COLLAUDO - ABNAHMEPRUEFZEUGNIS - INSPECTION CERTIFICATE - CERTIFICAT DE RECEPTION

In conformità a: **EN 10204 (2004), 3.1 / ISO 10474 (2013), 3.1**

Certificato nr. **MEST432174 / 2019 /**
Prüfung/Teil/États

Clienti / Destinatari/Purchaser/Client

Stato di fornitura: **Hot rolled - Annealed Cold Drawn**
Lieferzustand
Delivery state
État de livraison

Produttore:
Hersteller/Manufacture

ACCIAIERIE VALBRUNA S.P.A.

Ordine nr. **903007442 Stock - Canada**
Bestell
Your order
Commande

Tipo di Elaborazione: **E+AOD**
Erzeugnisverfahren
Melting process
Mode d'élaboration

Marchi di Fabbrica:
Zeichen des Lieferanten
Trade marks
Siglas de fábrica productora



Conferma ordine nr. **E19002981**
Werk-/Our OrderRef. nr.

Qualità: **303HS**
Werkstoff/Grade/Matériau

Punzone del Collaudatore:
Stempel des Werksachverständigen
Inspector's stamp/Plaque de l'inspecteur

MR

Avviso di Spedizione: **D-BZ19004707**
Lieferanweisung/Shipping instr.

Marca: **MV180ZHS (MAXIVAL)**
Markenbezeichnung
Brand / Marque

Punzonatura: **303HS**
Kennzeichnung
Marking
Marquage

SPECIFICHE:	Note:
Anforderungen / Requirements / Exigences	Aufzeichnungen / Notes / Notes
VSI-0.303 HS A,CF AISI 303 AMS 5640 V S30300 A AMS 5640 V TYPE1 A ASTM A320 2017 B8F (0) ASTM A314 2015 S30300 ASTM A320 2017A B8F (1) ASTM A320 2017 ASTM A582 2012 S30300 A (2) MIL-S-882 B/1 303 QQ-S-764 B/2 303 A	(0)Section II Part A 2017 EDITION Chemical analysis only. (1)Chemical analysis only. (2)Reapproved 2017

Pos. nr.	Oggetto	Dimensioni - in	Lunghezza - in	Colata	Prezzi	Peso - LB	Lotto nr.
Pos. nr. Post. n. Nr. de poste	Oggetto Prüfung Description de poste	Dimensionen Dimensions	Länge Length Longueur	Struktur Structure Structure	Preis Price Prix	Gewicht Weight Poids	Losung Lot Lieu
0010	Round	1,0000	146/ 148	432071		5.849	828010030

TEST ALLO STATO DI FORNITURA										
Test on delivery condition / Prüfung auf lieferbarem produkt / Test a l'état de fourniture / Prueba sobre el material así como entregado										
1) Lieferzustand/Anst. Transport/Anst. De Transport/Anst. Anst.										
TEST	Prova/Prüfung	Unit	Snervimento	Snervimento	Rottura	Allungamento	Strizione	Rottura	Durezza	
	Specimen/Prova Längsversuch Grain Orient. Thick Weld Orient. Thick Long Orient. Thick Short	°F	Snervimento Yield Stress Yield Stress Rp 0.2%	Snervimento Yield Stress Yield Stress Yield Stress	Rottura Tensile Strength Tensile Strength Tensile Strength	Allungamento Elongation Elongation Elongation	Strizione Reduction of area Reduction of area Reduction of area	Rottura Impact Value Impact Value Impact Value	Durezza Rockwell Rockwell Rockwell	HB
Valori richiesti	min	max								140
A	12,5	68	L	72	101	42	56			244

TEST ALLO STATO DI FORNITURA			
Test on delivery condition / Prüfung auf lieferbarem produkt / Test a l'état de fourniture / Prueba sobre el material así como entregado			
TEST	min	max	
A	Grain size for ASTM E112		7

Mechanical properties according to ASTM A370.

Analisi chimica												
Chemische Zusammensetzung/Chemical Analysis/Analyse chimique												
Colata / Metall	min 0,030	0,20	1,50	17,00	-	0,00	0,00	0,32	-	-	-	-
Sehrmetall/Guss	max 0,050	1,00	2,00	19,00	0,00	1,00	10,00	0,100	0,4000	-	-	-
	C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	Co %	P %	S %	Zr %	
432071	0,037	0,45	1,65	17,05	0,46	0,65	8,26	0,184	0,032	0,33	0,0012	

QUALITY MANAGEMENT SYSTEM CERTIFIED BY LLOYD'S REGISTER ACCORDING TO ISO 9001 : 2015, IATF 16949 : 2016, AS 9100			
Vicenza, 02/07/19 VCO052 - MEST432174	Il collaudatore di stabilimento der Werksachverständiger / Works Inspector / L'agent d'usine M. RIZZOTTO	Direzione Qualità Qualitätsmanagement/Quality Management/Qualité R. BERTELLI	Direzione Prodotto Produktmanagement/Product Management/Direction Produit P. MESSORI
			Pagina 1 di 2

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